# Ameren Companies' Comments Concerning the Implementation of Governor Blagojevich's Proposal for a Sustainable Energy Plan for Illinois

Central Illinois Light Company d/b/a AmerenCILCO, Central Illinois Public Service Company d/b/a AmerenCIPS and Illinois Power Company d/b/a AmerenIP (collectively, the Ameren Companies") submit the following responses to the questions posed by the Commission regarding Governor Blagojevich's proposed Sustainable Energy Plan for Illinois. Notably, given the short time period, full and complete responses can not be provided. Nevertheless, the Ameren Companies appreciate the opportunity to share the comments below.

# I. Renewable Portfolio Standard

## A. Renewable Energy Procurement Standard

We recommend that by 2006 at least 2% of the electricity to be sold to Illinois customers by electric utility and alternative retail electric suppliers be generated from renewable energy. We further recommend that the amount of electricity required from renewable resources increase by 1% annually until, in 2012, at least 8% of the total electricity supplied to Illinois customers is generated by renewable resources. Since wind resources are Illinois' most abundant and affordable renewable energy resource, we recommend that at least 75% of the renewable energy procured to meet the Renewable Portfolio Standard be required to be generated by wind resources.

1. What is the most effective way to implement these standards and attain the stated goals?

**Response:** The Ameren Companies believe that the most effective way to implement these standards is through a voluntary filing by each Illinois electric distribution company, in which the utility would propose the establishment of such standards, beginning in 2007, as a distribution function, and recovery of the associated costs through a non-bypassable distribution charge. In the ensuing proceeding, the Commission would consider whether provision of

power and energy through these means should be treated as a distribution function, because such renewable energy resources are largely non-dispatchable and it may be more feasible to achieving the state energy objective. The Commission would also consider the justness and reasonable of such proposals, and may find them prudent, subject to such rules and terms and conditions as the Commission shall find necessary based on the evidence of record. This provides the Commission the opportunity to define the renewable energy resource procurement process, affords the utilities reasonable certainty of cost recovery, and addresses the difficulty of subjecting ARES to such standards. The plan approved for each company would include a determination of the level of wind and/or other renewable capacity the utility needs to have under contract in order to satisfy the goals espoused by the Governor.

Alternatively, the obligation to procure renewable energy resources could be imposed on the distribution utilities' suppliers and on ARES. The Ameren Companies recent power procurement tariff filing would accommodate such an alternative approach. However, given concerns about the ability under existing law to order ARES to procure and provide renewable resources, the Commission may prefer the approach outlined in the preceding paragraph.

Further, there may be some benefit in considering renewable resources from outside the state. It is conceivable that other states may be able to offer more cost effective wind resources. The Commission should give due consideration to the availability of such resources, in order to best effectuate meeting any required standards.

Finally, the Commission should inquire as to the propriety of all renewable resources and alternative energy sources, and new technologies that may be available to achieve such standards.

2. What technical issues should be addressed regarding adding renewable resources, wind resources in particular, to meet these standards within the time frame contemplated in the Plan?

**Response:** The Ameren Companies believe is unlikely that a meaningful number of windmills can be planned, permitted, and constructed in time to be generating power in 2006. Turbine production is understood to be oversubscribed in 2005, and generally thought to be so for 2006 as well. Given that wind energy is the predominate renewable source, especially in the near term, achieving 75% of the 2% initial requirement with wind energy for 2006 appears to be an impossibility.

Adequate renewable generation by 2006 would require entering into PPAs with developers that have already secured land and transmission rights. MISO approval requires a significant lead time. Timing constraints may not

provide utilities the option to explore less expensive sites. The short list of developed sites that will be available to meet the 2006 requirements may cause higher costs due to the demand for wind resources. Expediting construction to achieve a 2006 target may also create higher costs.

Further study and understanding is needed with regard to transmission issues. Wind farm location and proximity to transmission facilities bear upon the cost effectiveness of such resources.

The above is not an exhaustive description of the technical concerns that should be considered. Even so, such issues should not be considered in a vacuum. There may be unintended impacts on utilities and consequently their customers if legal, regulatory, and market considerations are not recognized. Because the Mandatory Transition Period does not expire until January 2, 2007, initiation of the RPS in 2006 does not allow utilities to recover their costs of complying with the mandate. Further, the utilities currently purchase their power and energy from wholesale suppliers through FERC approved PPAs. Interfering with the economic considerations of these PPAs (which themselves expire at the end of 2006) could be financially detrimental.

Moreover, an RPS based on a percentage of MWh sales rather than on a percentage of forecasted or normalized sales, creates uncertainty for utilities, and could lead to overcontracting for renewable capacity, with a result of increased cost to consumers. For example, utility sales are heavily influenced by weather and industrial business activity (i.e., the economy). Economic and weather uncertainty can influence electric consumption by 10% or more in any given year. For the Ameren Companies, this means that 40,000,000 MWh expected to be delivered in a given year would lead us to plan to purchase 800,000 MWh in the first year of the RPS (2% of sales). If the weather is unusually severe and the economy grows more than expected, and actual sales are 10% higher than planned, an additional 80,000 MWh would be needed to comply with the RPS. Should this unattended consequence materialize, the Commission must give due consideration as to who will be financially responsible for any detriment.

Further, if 75% of the renewable energy standard is to be provided by wind generation, measuring compliance to the RPS by examining a percent of a utility's (or ARES) sales fails to contemplate that wind energy production is at the mercy of nature. When the wind blows, energy is produced. If the state experiences a "bad wind year", wind energy production will be less, and utilities and ARES could be subject to harsh penalties. The Commission should consider the benefits of establishing the measure for compliance on a "contracted for" Megawatt basis. Using a capacity based measure provides more stability and certainty that the Illinois Renewable Energy Policy is being met.

3. How have other states implemented renewable portfolio standards? (When describing other states' processes, please include any documentation, citations to web sites, expert contact information, etc., that may be useful in evaluating this information.)

Response: Investigation continues.

# B. Eligible Renewable Energy Resources

We recommend that only renewable energy resources, as that term is defined in the Renewable Energy, Energy Efficiency, and Coal Resources Development Law of 1997, be eligible to meet the Renewable Portfolio Standard requirements. In addition, energy produced by methane recovered from landfills may be considered a renewable energy resource for the purpose of meeting the Renewable Portfolio Standard requirements.

For Illinois to improve air quality and help comply with federal air quality standards, we recommend that renewable energy procured to meet the Renewable Portfolio Standard be generated in Illinois or in a directly adjacent serious or severe National Ambient Air Quality Standard non-attainment area as designated by the United States Environmental Protection Agency.

1. The renewable resource types identified in the Renewable Energy, Energy Efficiency, and Coal Development Law of 1997, include "wind, solar thermal energy, photovoltaic cells and panels, dedicated crops grown for energy production and organic waste biomass, hydropower that does not involve new construction or significant expansion of hydropower dams, and other such alternative sources of environmentally preferable energy." For each of the above resource types, as well as for methane recovered from landfills, what is the current capacity and output of such resources?

**Response:** The Ameren Companies offer the following information as it relates to their operations.

Renewable Energy Production								
Purchased Power in 2004								
	Ameren Operating Company							
	<u>Amere</u>	enIP	<u>Amere</u>	nCIPS	<u>AmerenC</u>	CILCO		
Resource	(MWh)	(MW)	(MWh)	(MW)	(MWh)	(MW)		
Wind	-							
Solar thermal	-							
Photovolatic	-							
Dedicated crops	-							
Organic waste biomass	-							
Hydropower	17,120	2						
Methane from landfills	46,803	8			27,808	10		
Total	63,923		-		27,808	}		

2. For each resource type, what are the currently planned expansions of such resources?

**Response**: Such expansions are currently driven by customers who have developed a renewable resource for the purpose of selling the power back to the utility. The following known projects are presently expected to provide additional renewable resources:

Renewable Energy Production Future Planned Projects								
	Ameren Operating Company							
Resource	AmerenIP	<u>AmerenCIPS</u>	AmerenCILCO					
Wind	less than 1 MW							
Solar thermal	-							
Photovolatic	-							
Dedicated crops	-							
Organic waste biomass	-							
Hydropower								
Methane from landfills	About 3 MW							

3. For each resource type, what is the technical potential for increasing the development of such resources in Illinois?

**Response:** Wind power could be expanded in the state, but areas of Class IV winds or above are limited. In general, wind speeds designated as Class IV or higher are needed to economically produce wind generated energy using today's wind production technology. There should be consideration given to wind power from outside the state.

Wide scale production of solar and photovoltaic energy is currently cost prohibitive. Such applications are currently best suited for specific customers who can use warm water.

Dedicated crops could also be used in to produce renewable energy, but dedicated crops would require thousands of acres land to plant and harvest to provide some level of MWh of energy each year. Existing Illinois power plants could be used to burn dedicated crops. Further study is warranted.

Organic waste biomass also has potential to contribute to meeting a renewable program goal. While biomass can certainly contribute toward a renewable energy goal, Illinois lacks large livestock operations to make a significant contribution in the renewable percentages outlined. Also, livestock operations are rural and often served by rural cooperatives. Investor owned utilities and ARES will have limited access to these customers, and thus limited means to develop this fuel source.

Hydropower has been limited to existing facilities. Expansion of this resource is limited as long as new construction or significant expansion of hydropower dams is limited.

Methane gas from landfills also can be used to generate power, an activity that should be encouraged. Methane that is not burned for the production of power may otherwise simply escape to the atmosphere, resulting in more harmful contribution to greenhouse gasses. Several landfills have already been tapped for power production. Additional development may be limited and further study should be considered.

4. How do these levels compare to the various standards identified in the Governor's Renewable Energy Procurement Requirement, cited above?

**Response**: The renewable energy levels identified above equate to approximately 0.23% of total generation delivered to the Ameren Companies' customers.

# C. Competitive Procurement

We recommend that electric utilities and alternative retail electric suppliers enter into competitive long-term (e.g. at least ten-year) power purchase agreements with renewable energy generators to meet the annual goals of the Renewable Portfolio Standard. We also suggest that fully executed power purchase agreements be submitted to the Illinois Commerce Commission with adequate lead time to ensure that necessary renewable energy resources are available to meet the Renewable Portfolio Standard requirements.

We concur with the Illinois Commerce Commission's recommendation as stated in its December 2, 2004 letter that "any RPS must consider the effect of the use of renewable resources on rates while also analyzing their net economic impact on utilities and ratepayers including health costs, electric distribution investment, etc." We recommend that the Commission take these factors into account when reviewing renewable power purchase agreements to ensure that such contracts are competitive with long-term electricity market price projections and have a stabilizing impact on long-term electric rates.

Power purchase agreements for renewable electricity procurement should be based on reasonable costs that reflect a full accounting of overall long-term benefits of renewable energy (i.e., consumer benefits of long-term fixed price contracts, environmental, economic and electricity system benefits including increased fuel diversity). Recovery for renewable energy procurement will be treated as other fuels as allowed by law and consistent with this standard. The ICC

may consult with consumer and environmental organizations, electric utilities, alternative retail electric suppliers, and developers of renewable energy generating facilities to help determine appropriate renewable energy prices.

1. How should the Commission implement this policy? Please include in your analysis how Illinois utilities and ARES should go about entering into "competitive long-term (e.g. at least ten-year) power purchase agreements" with renewable energy generators.

**Response:** In the event that the Commission approves renewable energy resource standards that call for long-term power purchase agreements with renewable energy generators, the Ameren Companies believe that such agreements should be pursued as other long-term agreements would be pursued, i.e., through a competitive procurement process. Given the nature of wind projects and the contract length attendant to such projects, an RFP process, which could be monitored by the Commission, would be appropriate. Proposed contracts resulting from that process could be submitted to the Commission for acceptance as conforming to the terms of the utility's renewable energy resource procurement plan, including the level of capacity procured (since the Commission does not have jurisdiction over the contract Other entities (e.g., consumer and environmental organizations, itself). alternative retail electric suppliers, and developers of renewable energy generating facilities) could intervene in this proceeding to determine whether the proposed contract conforms to the plan, to the extent their intervention is consistent with the Commission's standards for intervention. Upon ICC approval, the utilities would execute the long-term agreements.

2. How have other States addressed similar issues regarding the procurement of renewable resources? (When describing other states' processes, please include any documentation, citations to web sites, expert contact information, etc., that may be useful in evaluating this information.)

Response: Investigation continues.

3. The Plan states "Power purchase agreements for renewable electricity procurement should be based on reasonable costs that reflect a full accounting of overall long-term benefits of renewable energy (i.e., consumer benefits of long-term fixed price contracts, environmental, economic and electric system benefits including increased fuel diversity). Recovery for renewable energy procurement will be treated as other fuels as allowed by law and consistent with this standard." How should the Commission implement this policy?

**Response:** Approval of renewable energy resource plan should make clear that the costs of all resources procured in compliance with the plan will be fully

recovered in rates. In considering the approval of the plan itself, the Commission will likely hear evidence from various constituencies regarding the appropriate measure of costs and benefits. There is no need for the Commission to define or limit such evidence ahead of time.

Power purchase agreements for renewable power procurement (or the supplier agreement entered with the utility as a result of the energy auction) should reflect the real cost to the utility of securing and providing the renewable energy. In other words, the invoice from the renewable energy supplier should be the cost that is allowed to be recovered by the utility. The other "benefits" (i.e., long-term fixed price contracts, environmental, economic, electric system, and fuel diversity) will transfer to customers through charging customers for the invoice amount, being citizens of the state (economic), and otherwise through the electric utility's transmission and distribution rates. Traditional rate-making should be used, without imputing some other cost or benefit to customers or the utility. The Commission should consider conducting a study of renewables costs and benefits on a periodic basis, to confirm that continued renewables development will produce the policy benefits expected at a reasonable cost to customers.

4. Please provide information relating to how such benefits should be accounted for, including how other states have addressed similar issues. (When describing other states' processes, please include any documentation, citations to web sites, expert contact information, etc., that may be useful in evaluating this information.)

**Response:** Investigation continues.

5. How should the "overall long-term benefits of renewable energy (i.e., consumer benefits of long-term fixed price contracts, environmental, economic and electric system benefits including increased fuel diversity)" be measured?

**Response:** Investigation continues.

6. How have other states assessed such benefits? (When describing other states' processes, please include any documentation, citations to web sites, expert contact information, etc., that may be useful in evaluating this information.)

**Response:** Investigation continues.

#### D. Interstate Renewable Energy Trading

We recommend that the Illinois Commerce Commission in cooperation with the Illinois Department of Commerce and Economic Opportunity conduct a study by no later than December 31, 2008 to determine the feasibility of interstate trading of renewable energy

credits with other states that have adopted Renewable Portfolio Standards and which allow purchases of renewable energy generated in Illinois to meet those standards. We also recommend that the Illinois Department of Commerce and Economic Opportunity convene a meeting of energy officials from these states to discuss potential trading mechanisms.

1. What issues should this study examine?

**Response:** The Ameren Companies believe that renewable energy credits (RECs) will be a necessary component of the overall means of compliance with the proposed RPS until enough reliable resources are constructed in the state and become operational. The system allowing the use of these RECs should therefore be in place prior to the RPS taking effect.

2. Are there other interstate trading programs in effect?

Response: Investigation continues.

3. If so, how do they work? (When describing other states' processes, please include any documentation, citations to web sites, expert contact information, etc., that may be useful in evaluating this information.)

Response: Investigation continues.

# E. Penalties for Noncompliance

To ensure compliance with provisions of the Renewable Portfolio Standard, we recommend that electric utilities and alternative retail electric suppliers pay a penalty of \$25 per megawatt hour each year for any shortfall in contracted supply if they do not supply the required amount of renewable energy by the designated date. We suggest that any penalties be deposited into the Renewable Energy Resources Trust Fund to be used by the Department of Commerce and Economic Opportunity for the purposes of supporting the actual development, construction, and utilization of renewable energy projects in Illinois.

An electric utility or alternative retail electric supplier should not be fined if the company can demonstrate that its contracted renewable energy suppliers were unable to deliver adequate supplies of renewable energy due to circumstances beyond the control of the electric utility or alternative retail electricity supplier. In any case where the Illinois Commerce Commission finds that such a compelling demonstration has been made, the electric utility or alternative retail electric supplier must provide a mutually acceptable

alternative means of developing and utilizing renewable energy resources in Illinois, subject to the review and approval of the Illinois Commerce Commission and the Department of Commerce and Economic Opportunity.

1. What information should be required to demonstrate compliance with the provisions on the Plan?

**Response:** The specific information required will depend on the terms of the plan approved by the Commission. The Ameren Companies expect that it would include a demonstration that the distribution company issued RFPs conformed to the plan. Penalties should only apply where the utility has failed to comply with the plan. As written, penalties might apply where a utility has contracted for the level of wind capacity indicated in the plan, but the wind plants fail to produce the projected level of power and energy. In such event, the utility may seek to modify the plan, but it should not be fined.

Further what is meant by "compelling demonstration" should be explored. When, and if, penalties are to ever be applied, due process requires advanced knowledge of the expected behavior and the right to due process.

# II. ENERGY EFFICIENCY PORTFOLIO STANDARD

Increased investment in energy efficiency and electric demand reduction would reduce the amount of money that Illinois citizens and businesses spend on electricity and would produce significant economic, employment and environmental benefits. Many energy efficiency measures actually save more money than they cost.

### A. Energy Efficiency Procurement Requirement

In order to realize the significant benefits of energy efficiency and demand reduction, we recommend that the Illinois Commerce Commission establish goals for Illinois electric utilities and alternative retail electric suppliers to procure sufficient energy efficiency and demand reduction services to reduce electricity consumption in Illinois by the following amounts each year:

Years 2006 to 2008: 10% of Projected Annual Load Growth Years 2009 to 2011: 15% of Projected Annual Load Growth Years 2012 to 2014: 20% of Projected Annual Load Growth Years 2015 to 2017: 25% of Projected Annual Load Growth 1. Please indicate the most effective way to implement these standards and attain the stated goals.

**Response**: Due to the changing structure of the Illinois energy market (i.e., transition from a fully integrated/bundled utility to a business model that now allows customers to obtain their power from 3<sup>rd</sup> party suppliers), it should not be a foregone conclusion that utilities (or ARES) are the best entities to implement energy efficiency goals. The goals established above may be implemented through a 3<sup>rd</sup> party provider, state agencies, and/or utilities, ARES, and others to whom the goal may apply. The goals established above need to be evaluated to ensure they are attainable and cost effective. The goals should be flexible and take into account the shorter term realities for the marketplace.

Some guidelines on implementing new standards to attain goals are:

- Be specific on the expectations for any programs implemented to achieve these reductions and the ability to recover the costs related to the implementation of those programs.
- Be specific on how the goals will be measured so the results can clearly be evaluated.
- Ensure that it is possible to attain the goals given the dynamics of the electric marketplace. Evaluate the benchmarks set by other programs and assess the attainability of the above goals and deadlines.

Measuring the stated goals of the Energy Efficiency Portfolio Standard could be difficult. A baseline for the projected annual load growth should be established prior to implementation of any program. Further, some energy efficiency programs target kWh consumption while others target kW demand consumption. A target or goal should allow both types of programs. The proposed targets appear to allow only one type of efficiency program.

Actual year to year changes to kWh and kW load are impacted by the weather and the economy, and while their influences on sales can be estimated, there is always an unknown element associated with year to year changes in sales. Further, the projected annual load growth for utilities and ARES is influenced by customer switching. Next, a significant portion of any utility's projected annual load growth is attributed to the connection of new customers. Rather than establishing targets of a percentage of annual load growth, perhaps fixed targets would be more manageable.

The state's four largest utilities are now Integrated Distribution Companies (IDC). A utility who is an IDC must be careful in (or avoid) administering programs that could be perceived as an offering for energy

service. A utility's IDC status could limit the utility's participation in a program (e.g., economic load curtailment program administered by the utility).

All program costs should be included in the utilities delivery service rates, applicable to all customers regardless of supply source.

- 2. What technical issues should be addressed regarding the implementation of these standards within the time frame contemplated in the Plan?
  - Capturing load growth a baseline would need to be established.
  - Clear criteria established for what will constitute the procurement of sufficient energy efficiency and demand reduction services to reduce electricity consumption.
  - The RTO having the proper structure to encourage participation in demand reduction programs.
  - The benefits of demand efficiency programs are largely the customer's and involve "savings" of power and energy (rather than just the delivery portion of the customer's bill). Utilities or ARES cannot force customers to implement demand reduction measures. The customer will do so if the market influences are present and it is in their own best interest
- 3. Please indicate how other states have implemented similar standards. When describing other states' processes, please include any documentation, citations to web sites, expert contact information, etc., that may be useful in evaluating this information.

**Response**: Illinois has recently implemented energy efficiency legislation by enacting the Energy Efficiency Commercial Building Act which adopts the International Energy Conservation Code. Load growth will be impacted by the adoption of the new code.

The desired results to be achieved in the Governor's proposal will require many approaches. For example, another method to achieve demand reduction services to reduce electricity consumption in Illinois is through the Midwest ISO where they could implement Load Response Programs similar to the one that PJM has in place. The increases in participation have been substantial as illustrated below:

PJM Programs	2003 MWs Registered	2004 MWs Registered
PJM Economic Load Response Program	724	2,119
PJM Emergency Load Response Program	659	1,783
PJM Active Load Management Resources (all zones)	1,207	1,806
PJM Active Load Management Resources included in the Load Response Program	-445	-449
Total PJM Programs	2,145	5,259

Source: PJM web site retrieved March 1, 2005

Programs such as these are the appropriate way to accomplish desired results because they are determined by the marketplace.

## B. Competitive Procurement

We recommend that electric utilities and alternative retail electric suppliers enter into competitive long-term (e.g. at least ten-year) contracts with efficiency services providers to meet the annual goals of the Energy Efficiency Portfolio Standard to implement efficiency measures for residential, commercial and industrial customers. At the end of each year, electric utilities and alternative retail electric suppliers would be required to demonstrate that these efficiency measures reduced their total electricity sales and/or demand by the goals of the Energy Efficiency Portfolio Standard.

Similar to the treatment of renewable resources, we recommend that the Commission review contracts with Energy Efficiency Service Providers to ensure that such contracts are competitive with long-term electricity market price projections and have a stabilizing impact on long-term electric rates. We recommend that the costs of complying with these energy efficiency and demand reduction requirements be fully recoverable in rates if they are shown to be competitive with traditional forms of generation and delivery resources. Contracts for energy efficiency and demand response should be based on reasonable costs that reflect a full accounting of overall long-term benefits of such resources (i.e. consumer benefits of long-term fixed price contracts, environmental, economic and electricity system benefits). Contracts could be in the form of up-front capital investment or ongoing energy/demand payments.

1. How should the Commission implement this policy?

**Response**: In general, efficient use of electricity should be encouraged. The competitive market for electricity should drive those economies and any policies implemented should be done in conjunction with the efforts of the applicable RTO (i.e. Midwest ISO) to ensure that proper price signals are developed to encourage the efficient use of power and energy and properly

reward those who undertake steps to achieve that efficiency. For example, the PJM Load Response Programs for emergency and economic purposes are excellent approaches to achieve part of the goal.

Utilities no longer know if they will have customers for 10 years, thus contracts with efficiency service providers must be flexible. ARES and utilities serve at the will of the customer. If the customer desires, it can leave and take power from a different ARES. Contracts with suppliers need to consider the reality of customer migration between suppliers, including the utility. Also, limiting applicability to just utilities and ARES misses a substantial portion of electric consumers within the state. Municipals, cooperatives, and government entities (public universities) that provide power to customers are not subject to these same efficiency goals.

In the Post 2006 workshops held last summer, several market participants expressed a very strong opinion that utilities should be prohibited from offering new energy related products and services. Rather, they argued 3<sup>rd</sup> party vendors should be the entities that offer new products and services, including demand response products. The competitive market in Illinois is still developing, and any state programs should be designed in a way that compliments market-based solutions.

2. How should these benefits be accounted for, including how other states have addressed similar issues? When describing other states' processes, please include any documentation, citations to web sites, expert contact information, etc., that may be useful in evaluating this information.

**Response**: Accurately measuring costs and benefits of programs ensure that only effective programs are performed. Effective programs should have a positive net benefit (benefits exceed costs). No entity should have to meet a "goal" if programs lack a positive net benefit. In measuring benefits, the suggestion seems to be that both direct and indirect costs and benefits be measured. Direct costs and benefits can be measured with some degree of confidence. Indirect costs and benefits are extremely difficult to measure, and can be highly subjective.

3. How should the Commission measure the success of these programs?

**Response**: As discussed above, measuring the success of the program can be difficult. Electric sales change from year to year, and the changes may have little to do with energy efficiency. That said, each program that is implemented should have a planned objective and cost. The measurement of effectiveness will be based on the actual performance of each plan to the stated objective (i.e., load reduction target) and cost. Prudently incurred costs should be afforded unfettered rate recovery.